

REMARKS

Applicant requests entry of this amendment, reconsideration, and allowance in view of the following remarks.

Claim 1 is amended to add steps in the process found in the specification and shown in the drawings. The detection unit of the invention has multiple chambers, including detection chambers and reactant chambers. The detection chamber holds the sample nucleic acid with taggants and reactants are stored in other chambers. The reactants are transferred into the detection chamber to contact the sample and thereby detect any target nucleic acid. See Figs. 1-C and 3-C.

The steps of providing the detection chamber and reactant chambers, storing the reactants in the reactant chambers and then transferring the reactants to the detection chamber are not shown in the art of record. These steps are distinctive features of the invention that separate it from the art of record. Such art fails to show or suggest these features. These features enable the inventive method to be used in the field, rather than only in a laboratory.

Dependent claim 38 add a step of transferring the contents of the detection chamber to a waste chamber. This step also enhances and enables the use of the process in the field. Tests may be conducted with detection units that carry their own reactants and collect their own waste.

Dependent claims 39-41 add time limited steps for carrying out the detection process. The inventive process may be performed in less than an hour. This time limit is supported by the specification which provides the preferred embodiment will perform testing in 15-30 minutes. See paragraph [0012]. Claim 40 is directed to that preferred embodiment and claim 41 covers the lower limit. The rapid response time of the inventive process is not shown or suggested by the art of record.

Dependent claim 42 further defines the transferring step as a step of pumping. This is supported in the specification at paragraph [0025].

Dependent claim 43 defines the further step of displaying the results. The art of record does not show or suggest such a step.

Dependent claim 44 defines the further step of programming the detection unit to carry out key steps in the detecting process. This feature enhances and enables the portability feature of the invention. It is supported in the specification at paragraphs [0032] and [0037].

Dependent claim 45 defines the process for simultaneously detecting multiple nucleic acids. Its method operates on an array of multiple sets of electrically separated electrical conductor pairs where each set has unique capture probes for capturing one of the multiple nucleic acids. Support for this amendment is found in paragraph [0019].

This amendment adds limitations to the claims that are not shown or suggested by the art of record. The added limitations are directed to one or more physical steps which either are not or cannot be found in the art of record. These added limitations define portions of the inventive method that allows it to be portable and fast.

Consideration and allowance are respectfully requested.

Respectfully submitted,

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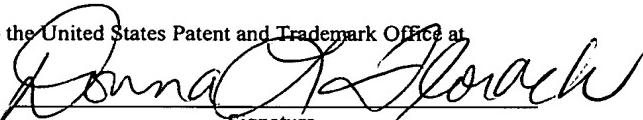
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